Annual Water Quality Report

Water testing performed in 2005

PWS ID#: GA0450002

Continuing Our Commitment

Once again we proudly present our annual water quality report. This edition covers all testing completed from January through December 2005. We are pleased to tell you that our compliance with all state and federal drinking water laws remains a constant and vigilant effort to go above and beyond the minimum standards. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

For more information about this report, or for any questions relating to your drinking water, please call Don North, Water Plant Superintendent, or Connie Mashburn, Laboratory Analyst, at (770) 830-2021.

Community Participation

The mayor and city council meet on the first Monday of each month at 6:00 p.m. in the City Public Safety Complex, 115 West Center Street, Carrollton, Georgia. The Carrollton Water Quality Commission board is interested in any questions, concerns, or comments that you may have.

As a part of the mayor and city council's goal to improve the City of Carrollton Water System, they have formed the Carrollton Water Quality Commission. This Commission is made up of citizens who represent the people of Carrollton in order to give them a better voice in addressing issues regarding our water system. The Commission is interested in hearing your concerns, which may range from the level of service with billing and meter reading, to the professionalism of our service and repair crews, to the quality of the water itself. Please e-mail us at waterconcerns@carrollton-ga.gov or call and leave your questions/concerns/ comments on voice mail at (770) 830-2000, ext. 233. Using the downloadable form that may be found on the City Web site, www.carrollton-ga.gov, you may also drop written questions/concerns/comments in the drive-through window at City Hall. The date, time, and location of all Water Quality Commission board meetings are posted on the Web site as well as all minutes from previous city council meetings.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

City-wide Meter Replacement/ Upgrade Program

The City of Carrollton is currently undergoing a city wide residential meter change out program. This means that in approximately the next six months every residential water meter will be replaced with a new meter equipped with a back-flow prevention device at each meter. This meter upgrade program is being conducted at the expense of the City of Carrollton.

Thermal Expansion

Once the new meters are in place each resident will need to install Thermal Expansion devices. This device will be in the best interest of each resident but also at the expense of each resident. A Thermal Expansion device will create a place for the excess created by the expansion of water during the heating process. If there is not a place for this water to collect it may cause pressure to build up in existing plumbing and cause leaks or even build up enough pressure to rupture plumbing fixtures.

- Thermal Expansion Devices are typically "little blue tanks", the owner must have minor plumbing skills/knowledge to install properly
- Pop-off valves on water heaters are not Thermal Expansion Devices
- Certain flush valves in toilets will allow for Thermal Expansion
- There is a certain type of Thermal Expansion valve that can be placed in series with the water heater. It must be piped to the outside of the residence.

How to Check for Leaks?

1. Turn off all water in the house (verify this)
2. Go to water meter, lift lid (being careful not to injure yourself)
3. Raise the lid on the meter dial
4. On top of the meter dial you will find a red arrow, next to that will be red triangle (until all meters are changed may be white or blue)
5. If either the arrow or the triangle is spinning, then you have a water leak on your side of the meter.

Substances That Might Be in Drinking Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it can acquire naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Where Does My Water Come From?

The City of Carrollton draws its water from the Little Tallapoosa River. We are also fortunate enough to have three reservoirs. The Little Tallapoosa River runs through one of these reservoirs, Lake Buckhorn. Sharpes Creek Reservoir flows into the Little Tallapoosa River, and Lake Carroll flows into Curtis Creek, which then flows into the Little Tallapoosa River. Lake Carroll and Sharpes Creek Reservoirs have restrictions on them to aid in protecting our water sources. A copy of these restrictions may be obtained from the Water Department at city hall.

The categories of potential pollution sources found in the Source Water Assessment are confined animal feed lots, NPDES stormwater and mining, airports, hazardous waste facilities and mining, LAS permit holders, and roads that cross over streams. A copy of the Source Water Assessment may be viewed on the City's Web site: www.carrollton-ga.gov, water quality. Click to view the Source Water Assessment.

Cryptosporidium in Drinking Water

Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100% removal. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Cryptosporidium monitoring in 2005 revealed no presence of these organisms in our source water.

In 2005 the Georgia Water and Pollution Control Association recognized the City of Carrollton Water System with the following two awards:

Laboratory Quality Assurance

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Certificate of Achievement for Water Quality Report

What causes Pink Stains?

The pink stains frequently noted in shower stalls, tubs, tile, toilets, sinks, toothbrush holders and on pets' water bowls is caused from various types of mold and bacteria in the air – not the water. This mold and bacteria is commonly found in soil, plants, insects and people. The bacteria can and is introduced into the house through any and all of the above mentioned sources. The moist, warm environment of the bathroom and pets' water bowls is the perfect environment for this mold / bacteria to thrive.

The best solution to this problem is to continually clean and dry the problem area to keep them free from mold and bacteria. Chlorine-based compounds work the best, being careful of any abrasive compounds to avoid scratching fixtures, which them makes them the perfect environment for mold / bacteria to grow and thrive.

What are the Particles in my Water?

If you draw up a glass of water and:

- It is milky but after just a minute or two clears then there is air in the water.
- White particles that sink to the bottom of the glass: then there is an accumulation of lime in the service line.
- There are particles that float in the glass: then those are pieces of the dip tube from the water heater. These tubes do have a tendency to break down over time.

Table Definitions

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

Sampling Results

During the past year we have conducted thousands of Laboratory tests in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. Although all of the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	MCL (MRDL)	MCLG (MRDLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2005	(4)	(4)	1.54	0.11-2.32	No	Water additive used to control microbes
Fluoride (ppm)	2005	4	4	0.75	0.07-1.26	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
HAAs [Haloacetic Acids] (ppb)	2005	60	NA	43	23-72	No	By-product of drinking water disinfection
Nitrate (ppm)	2005	10	10	0.28	0.2-0.5	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Coliform Bacteria (# of positive samples)	2005	1 positive monthly sample	0	1	NA	No	Naturally present in the environment
Total Organic Carbon (ppm)	2005	TT	NA	1.6	1.3-2.1	No	Naturally present in the environment
TTHMs [Total Trihalomethanes] (ppb)	2005	80	NA	52	19-90	No	By-product of drinking water disinfection
Turbidity (NTU)[1]	2005	TT	NA	0.27	0.03-0.27	No	Soil runoff
Turbidity (lowest monthly % of samples meeting limit)	2005	TT	NA	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from 30 homes throughout the service area

SUBSTANCE (UNITS)	YEAR SAMPLED	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH%TILE)	HOMES ABOVE ACTION LEVEL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2004	1.3	1.3	0.11	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2004	15	0	3.8	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

[1]Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.